

Environmental Protection Agency

§ 60.453

G, the volume-weighted average mass of VOC's in coatings consumed in a calendar month per unit volume of applied coating solids (kilograms per liter).

L_c, the volume of coating consumed, as received (liters).

L_a, the volume of VOC-solvent added to coatings (liters).

L_r, the volume of VOC-solvent recovered by an emission control device (liters).

L_s, the volume of coating solids consumed (liters).

M_a, the mass of VOC-solvent added to coatings (kilograms).

M_o, the mass of VOC's in coatings consumed, as received (kilograms).

M_r, the mass of VOC's recovered by an emission control device (kilograms).

N, the volume-weighted average mass of VOC's emitted to the atmosphere per unit volume of applied coating solids (kilograms per liter).

Q_e, the volumetric flow rate of a gas stream leaving a control device and entering the atmosphere (dry standard cubic meters per hour).

Q_i, the volumetric flow rate of a gas stream entering a control device (dry standard cubic meters per hour).

Q_t, the volumetric flow rate of a gas stream emitted directly to the atmosphere (dry standard cubic meters per hour).

R, the overall VOC emission reduction achieved for an affected facility (fraction).

T, the transfer efficiency (fraction).

V_i, the proportion of solids in a coating (or input stream), as received (fraction by volume).

W_o, the proportion of VOC's in a coating (or input stream), as received (fraction by weight).

§ 60.452 Standard for volatile organic compounds.

On or after the date on which the performance test required by § 60.8 is completed, no owner or operator of an affected facility subject to the provisions of this subpart shall discharge or cause the discharge of VOC emissions that exceed 0.90 kilogram of VOC's per liter of applied coating solids from any surface coating operation on a large appliance surface coating line.

§ 60.453 Performance test and compliance provisions.

(a) Sections 60.8 (d) and (f) do not apply to the performance test procedures required by this subpart.

(b) The owner or operator of an affected facility shall conduct an initial performance test as required under § 60.8(a) and thereafter a performance test each calendar month for each affected facility according to the procedures in this paragraph.

(1) An owner or operator shall use the following procedures for any affected facility that does not use a capture system and control device to comply with the emissions limit specified under § 60.452. The owner or operator shall determine the composition of the coatings by formulation data supplied by the coating manufacturer or by analysis of each coating, as received, using Method 24. The Administrator may require the owner or operator who uses formulation data supplied by the coating manufacturer to determine the VOC content of coatings using Method 24. The owner or operator shall determine the volume of coating and the mass of VOC-solvent used for thinning purposes from company records on a monthly basis. If a common coating distribution system serves more than one affected facility or serves both affected and existing facilities, the owner or operator shall estimate the volume of coatings used at each facility, by using the average dry weight of coating and the surface area coated by each affected and existing facility or by other procedures acceptable to the Administrator.

(i) Except as provided in paragraph (b)(1)(iv) of this section, the weighted average of the total mass of VOC's consumed per unit volume of coating solids applied each calendar month will be determined as follows.

(A) Calculate the mass of VOC's consumed (M_o+M_a) during the calendar month for each affected facility by the following equation:

$$M_o + M_d = \sum_{i=1}^n L_{ci} D_{ci} W_{oi} + \sum_{j=1}^m L_{dj} D_{dj}, \quad (1)$$